PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of the existing traffic control signal at MD 174 and the SB I-97 Ramps in Anne Arundel County. This modification involves the installation of APS and countdown pedestrian signal for the north leg of the intersection. MD 174 is considered to run in an East-West direction.

II. INTERSECTION OPERATION

1. The intersection operates in a NEMA 6-phase, fully-actuated mode. A pushbutton activated pedestrian crossing for the North leg of the intersection will be provided.

PUSHBUTTON OPERATION

NORTH LEG WAIT MESSAGE: WAIT TO CROSS GEORGE CLAUSS AT QUARTERFIELD NORTH LEG WALK MESSAGE: RAPID TICK

NOTES

- 1. All pavement markings shall be installed in accordance with Administration standards.
- 2. The contractor shall be responsible for terminating all signal cable to the appropriate terminals and properly lable each cable.
- 3. All traffic signal foundations shall be installed at the final sidewalk or curb grade for closed sections, highest roadway profile grade for open sections, to meet clearances as specified in MD 816.03, MD 818.01, MD 818.02 and MD 818.04 Standard Plates. The contractor shall verify ultimate grades prior to the installation of all signal equipment.
- 4. All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.
- 5. The contractor shall maintain the continuous operation of all interconnect, vehicular, pedestrian detectors, and lighting devices. If any device is damaged by the contractor, it shall be repaired within 72 hours by the contractor at no cost to the Administration after notification by the Engineer.
- 6. Pushbuttons are to be located so that they can be activated by a person in a wheelchair from a 60"x 60" level landing area. A level landing area is an area with a cross slope of less than or equal to 2%.
- 7. The 10' separation between pushbuttons is to be measured from the face of the pushbutton to the face of the pushbutton, not from the face of the pole to the face of the pole.
- The pushbuttons are to be located so that a person in a wheel chair located on the level landing area does not have to reach more than 18".
- The location of Accessible Pedestrian Signal Pushbuttons, must meet the location requirements of MUTCD Sec. 4E-09 and Figure 4E-2 and the NCHRP publication, "Accessible Pedestrian Signals: Guide To Best Practice". If not met, the contractor is to stop work on pushbutton locations until the conflict is resolved. If neccessary a design waiver shall be obtained signed by the Director, Office of Traffic and Safety.
- 10. Pushbuttons shall be installed parallel to the crosswalk for which they are intended.

CONTACTS

<u>DISTRICT</u>

MS. KIMBERLY TRAN ASSISTANT DISTRICT ENGINEER - TRAFFIC 1-410-841-1003

MR. JOHN MAYS ASSISTANT DISTRICT ENGINEER - MAINTENANCE 1-410-841-1013

MR. MIKE HUBER DISTRICT UTILITY ENGINEER 1-410-841-1039

MR. JOHN GOVER SHA ADA COORDINATOR 410-545-8766

OFFICE OF TRAFFIC AND SAFETY

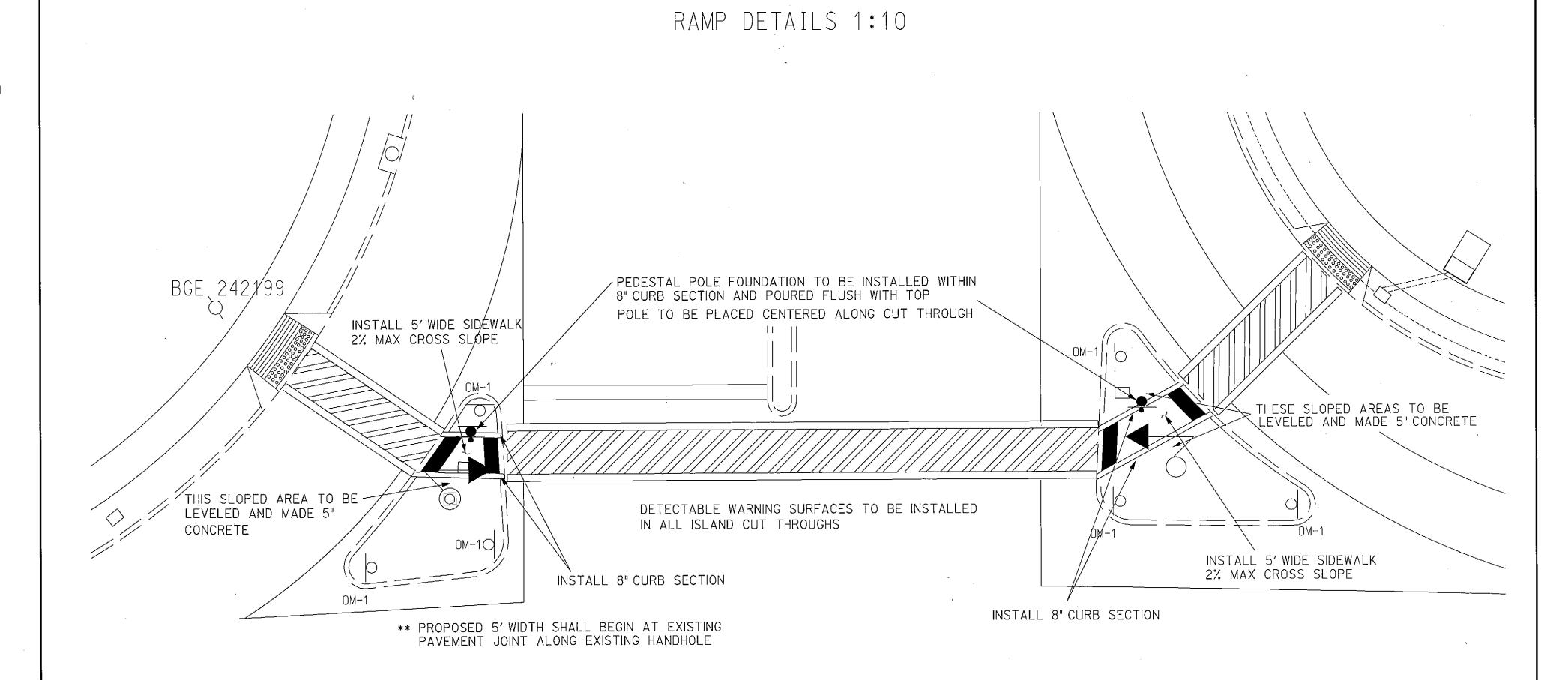
MR. RICHARD DAFF SR. CHIEF, TRAFFIC OPERATIONS 410-787-7630

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MR. ED RODENHIZER TEAM LEADER SIGNAL OPERATIONS 410-787-7650

MR. EUGENE BAILEY TEAM LEADER SIGN OPERATIONS 410-787-7670

MS. DARLENE EIDE SUPPLY OFFICER IV (SIGNAL SHOP WAREHOUSE) 410-787-7668



A. EQUIPMENT TO BE SUPPLIED BY THE ADMINISTRATION

TEM # QUANTITY ITEM DESCRIPTION

9571 27 SF SHEET ALUMINUM SIGN-MAST ARM/POLE MOUNTED

- 2 EA 9"X15" R10-3(1) PUSHBUTTON TO CROSS SIGNS GEORGE CLAUSS BLVD

- 1 EA 48"X75" ASSOCIATED SHIELD ASSEMBLY

- EAST, MD 174, LEFT ARROW

9570 25.5 SF SHEET ALUMINUM SIGN-GROUND MOUNTED

- 2 EA 36"X36" W11-2 PEDESTRIAN SIGN FY

- 1 EA 21"X15" W16-7pL ARROW FY - 1 EA 21"X15" W16-7pR ARROW FY

- 1 EA 24"X18" W13-4(1) ACROSS RAMP FY

B. EQUIPMENT TO BE SUPPLIED AND/OR INSTALLED BY THE CONTRACTOR

ITEM # QUANTITY ITEM DESCRIPTION

1 EA MAINTENANCE OF TRAFFIC

55 LF F&I STANDARD TYPE A COMBINATION CURB AND GUTTER 12" GUTTER PAN AND 8" DEPTH

225 SF F&I 5" CONCRETE SIDEWALK

20 SF F&I DETECTABLE WARNING SURFACE FOR CURB RAMPS

1 EA F&I 2-WIRE CENTRAL CONTROL UNIT 2 EA F&I AUDIBLE TACTILE PEDESTRIAN PUSHBUTTON

2 EA F&I BREAKAWAY PEDESTAL POLE (ANY SIZE) 8009

2 EA F&I LED 16" COUNTDOWN PEDESTRIAN SIGNAL HEAD 10 LF F&I UP TO 4" SCH 80 RIGID PVC CONDUIT-TRENCHED

8037 35 LF F&I WOOD SUPPORTS UP TO 4"X6"

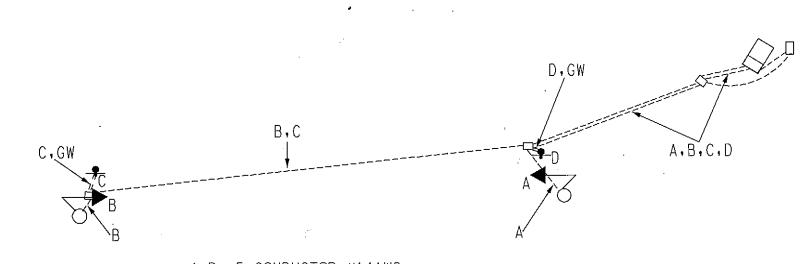
INSTALL OVERHEAD OR GROUND MOUNTED SIGN 8038 REMOVE AND RESET DECORATIVE BRICK SIDEWALK

25 LF F&I NO 6 AWG STRANDED BARE COPPER GROUND WIRE

250 LF F&I ELECTRICAL CABLE-2-CONDUCTOR NO 14 AWG 8053 250 LF F&I ELECTRICAL CABLE-5-CONDUCTOR NO 14 AWG

NEG 6.25 SF RELOCATE EXISTING GROUND MOUNTED SIGN AND SUPPORT

WIRING DIAGRAM



A,B 5-CONDUCTOR #14AWG C,D 2-CONDUCTOR #14AWG · GW #6 STRANDED BARE COPPER GROUND WIRE

TOP NO. XX353-11 SHA NO: AA816A52 K52 I-97 SB ramps DMD 174



STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION MD 174 @ SB I-97 RAMPS

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APPROVALS	REVISIONS	GENERAL INFORMATION SHEET				
\ \ .\\	C INSTALL APS/CPS ON NORTH LEG SEPTEMBER, 2010 TIMS K403 XX3535168	SCALE AS SHOWN	I. ADVERTISED DATE	SEPT., 2010 C	CONTRACT NO. XX3535168	
TEAM LEADER OT	CJS AND PROBLEM CONTROL OF THE INTERSECTION SHA NO. BW996M82	DESIGNED BY	C STRAIN	_	ANNE ARUNDEL 02017404.80	
ASST. DIV. CHIEF CHIAL	5-18-06 SMH JAH MAR MAR TH 7/5	CHECKED BY	D DODA	TIMS NO.	. <u>K403</u>	
DIVISION CHIEF	A REDLINE REVISION ADD VIDEO DETECTION CAMERAS	. F.A.P. NO		TOD NO.	TOD NO	
OFFICE DIRECTOR	5–18–06 JWA MAR DAZ BRK TH	TS NO. 4171–C	DRAWING -	· OF ·	SHEET NO. 2 OF 2	

PLOTTED: Friday, September 10, 2010 at 2:05:01 PM